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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/662,492

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Albert E. Ortega

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12/28/2007

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EXAMINER

BUTLER, PATRICK

ART UNIT

PAPER NUMBER

1791

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/662,492	<b>Applicant(s)</b> ORTEGA, ALBERT E.	
	<b>Examiner</b> Patrick Butler	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 6-9, 21-23 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-20, 24-26, and 28-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 14, 15, 17-20, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Gillespie (U.S. Patent No. 5,783,503) as evidenced by Tortora (*Understanding Textiles*, pages 38, 39, and 401).

With respect to Claim 1, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret (extruding), attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 4; col. 3, lines 16-34 and col. 9, lines 18-26). Gillespie teaches using combinations including nylon and polyester (see Gillespie, col. 4, lines 66 - col. 5, line 25). Increases in moisture absorbency increase fiber conductivity, which is antistatic since it limits static buildup, and nylon's or polyester's presence would improve the absorbency of the blend since they have 0.4-4.5% standard moisture regain (see Tortora, *Understanding Textiles*, pages 38 and 39, Table 2.1, and page 401, second paragraph). Thus, nylon's or polyester's presence acts as antistatic agents to the polyester or olefins in the blends.

With respect to Claims 2 and 4, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 3, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8), which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

With respect to Claim 5, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claims 14 and 15, nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claim 17, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret using blends in separate extruders to form filament with one of the blends forming a portion of the surface of the filaments, attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 3 and 4; col. 3, lines 16-34; col. 5, line 66 through col. 6, line 9; col. 8, lines 8-19; and col. 9, lines 18-26).

With respect to Claim 18, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 19, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8), which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

With respect to Claim 20, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claim 26, Gillespie teaches that at least about 5 percent of the surface area of each filament is made of a nylon polymer (see Fig. 3; see col. 5, line 66 through col. 6, line 4). Nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 14, 15, 17-20, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie (U.S. Patent No. 5,783,503) in view of Tortora (Understanding Textiles, pages 153-157, 401, and 402)

With respect to Claim 1, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret (extruding), attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 4; col. 3, lines 16-34 and col. 9, lines 18-26).

If Gillespie's nylon and polyester do not meet the claimed limitation of "antistatic agent" (see col. 4, lines 66 - col. 5, line 25), then Gillespie does teach to incorporate into the polymer melt components to control electrical properties (forming in an extruder) (see col. 5, lines 35-42).

Tortora teaches bicomponent fibers containing metal or carbon, which are antistatic agents (see page 401, forth paragraph, through page 402, line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tortora's antistatic metal or carbon in the composition of fibers taught by Gillespie in order to produce fibers that decrease static buildup (see Tortora, page 401, paragraphs 2-4) and in order to control electrical properties (see Gillespie col. 5, lines 35-42).

With respect to Claims 2 and 4, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 3, Gillespie teaches using “nylon ... and copolymers thereof” (see col. 5, lines 5-8), which reads on the claim language “nylon copolymers,” which meets the limitations of the claim.

Moreover, with respect to Claim 3, Tortora teaches that nylon 6 has a higher tenacity than nylon 6,6 (see page 156, *Strength* section). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select nylon 6 as the nylon to use in Gillespie in order to have greater tenacity.

With respect to Claim 5, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claims 14 and 15, nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claim 17, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret using blends in separate extruders to form filament with one of the

blends forming a portion of the surface of the filaments, attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 3 and 4; col. 3, lines 16-34; col. 5, line 66 through col. 6, line 9; col. 8, lines 8-19; and col. 9, lines 18-26).

With respect to Claim 18, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 19, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8, which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

Moreover, with respect to Claim 19, Tortora teaches that nylon 6 has a higher tenacity than nylon 6,6 (see page 156, *Strength* section). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select nylon 6 as the nylon to use in Gillespie in order to have greater tenacity.

With respect to Claim 20, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claim 26, Gillespie teaches that at least about 5 percent of the surface area of each filament is made of a nylon polymer (see Fig. 3; see col. 5, line 66 through col. 6, line 4). Nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if



both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

Claims 1-5, 10-20, 24-26, and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie (U.S. Patent No. 5,783,503) in view of either Warburton (US Patent No. 4,081,383) or George (US Patent No. 4,167,464).

With respect to Claim 1, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret (extruding), attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 4; col. 3, lines 16-34 and col. 9, lines 18-26).

If Gillespie's nylon (polycaprolactum) and polyester do not meet the claimed limitation of "antistatic agent" (see col. 4, lines 66 - col. 5, line 25), then Gillespie does teach to incorporate into the polymer melt components to control electrical properties (forming in an extruder) (see col. 5, lines 35-42).

Warburton teaches using a copolymer that contains sodium salts (sodium salts) of dodecane-1-sulfonic acid (a C<sub>10</sub>-C<sub>18</sub> alkane and sulfonic acid) (see col. 4, line 60 through col. 5, line 6) and vinyl sulfonic acid (see col. 3, line 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Warburton's copolymer composition in the extrusion of Gillespie in order to provide the product with better anti-soiling treatment, and to control

the anti-soiling treatment's polymer particle size (see Abstract and col. 4, lines 60 and 61).

Alternative to Warbuton, George teaches using a copolymer that contains sodium salts (sodium salts) of dodecane-1-sulfonic acid (a C<sub>10</sub>-C<sub>18</sub> alkane and sulfonic acid) or octadecane-1-sulfonic acid (a C<sub>10</sub>-C<sub>18</sub> alkane and sulfonic acid) (see col. 4, line 65 through col. 5, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use George's copolymer composition in the extrusion of Gillespie in order to provide the product with better degree of absorption of water and body fluids (see Abstract; col. 1, lines 46-49; and col. 6, lines 42-59).

Since Applicant's claim language (see Claim 16) shows that a blend containing polycaprolactum, sulfonic acid, a C<sub>10</sub>-C<sub>18</sub> alkane, and sodium salts is an antistatic agent, Warburton's and George's teaching of the agent (as cited above) necessarily meets the claimed limitation of "antistatic agent." Moreover, Warburton recognizes the benefit of the polymer in reducing static build-up (see col. 6, lines 34-37).

With respect to Claims 2 and 4, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 3, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8), which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

With respect to Claim 5, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claims 10, 11, 16, and 28, Claim 16's and Claim 28's antistatic agent of polycaprolactum, sulfonic acid, a C<sub>10</sub>-C<sub>18</sub> alkane, and sodium salts is taught by Gillespie in view of Warburton or George as cited above with respect to Claim 1. Such antistatic agent was indicated to read on Claims 10 and 11 (see Office Action mailed 22 March 2006, page 3, third paragraph and Applicant's Arguments received 22 December 2006, page numbered 9 by Applicant, first paragraph).

With respect to Claims 12, 13, 24, 25, 29, and 32, applicant's specification teaches that a composition of a polycaprolactum, sulfonic acid, a C<sub>10</sub>-C<sub>18</sub> alkane, and sodium salts added to a two polymer delivery results in 0.6 Kilovolts/inch when added at 1% concentration (see Specification, page 10, table 1).

As Warburton's composition teaches adding the sodium salts (sodium salts) of dodecane-1-sulfonic acid (a C<sub>10</sub>-C<sub>18</sub> alkane and sulfonic acid) is present from 0.5-8% (see col. 5, lines 47-49), the 1% concentration is taught. As George's composition teaches adding the sodium salts (sodium salts) of dodecane-1-sulfonic acid (a C<sub>10</sub>-C<sub>18</sub> alkane and sulfonic acid) is present from 0.01-5% (see col. 5, lines 47-49), the 1% concentration is taught. Therefore, Warburton's or George's static would measure at less than one kilovolt principally because it teaches the same process and composition as applicant, which arrived at said static level.

With respect to Claims 14 and 15, nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side

configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claim 17, Gillespie teaches producing a spunbond product (spunbond nonwoven fabric; bonding the filaments of the web) by originating filaments from a spinneret using blends in separate extruders to form filament with one of the blends forming a portion of the surface of the filaments, attenuating and drawing the filaments through a slot draw apparatus, and depositing the filaments onto a collection surface to form a web (see Fig. 3 and 4; col. 3, lines 16-34; col. 5, line 66 through col. 6, line 9; col. 8, lines 8-19; and col. 9, lines 18-26).

With respect to Claim 18, Gillespie teaches using nylon, polyester, PE, PP, and PBT and combinations, which read on the claims (see Gillespie, col. 4, lines 66-col. 5, line 25).

With respect to Claim 19, Gillespie teaches using "nylon ... and copolymers thereof" (see col. 5, lines 5-8, which reads on the claim language "nylon copolymers," which meets the limitations of the claim.

With respect to Claim 20, Gillespie teaches using a slot draw apparatus (see col. 9, lines 18-25).

With respect to Claim 26, Gillespie teaches that at least about 5 percent of the surface area of each filament is made of a nylon polymer (see Fig. 3; see col. 5, line 66

through col. 6, line 4). Nylon is one of the components in the bicomponent filament (see col. 4, lines 66 through col. 5, line 17). In a side-by-side configuration (see Fig. 3; see col. 5, line 66 through col. 6, line 4), the bicomponent filament would necessarily have at least one of the two components with more than 5% of the surface area. Moreover, if both components were nylon as taught by Gillespie (see col. 5, lines 33-42), nylon would occupy 100% of the surface area of each filament, which includes the claimed range of at least about 5%.

With respect to Claims 30 and 31, Gillespie teaches that at least about 5 percent of the surface area of each filament is and all filaments are made of a nylon polymer (see Fig. 3; see col. 5, line 66 through col. 6, line 4).

### ***Response to Arguments***

The affidavit under 37 CFR 1.132 filed 12 October 2007 is insufficient to overcome the rejections of claims 1-5, 10-20, 24-26, and 28-32 based upon the 35 U.S.C. 103(a) rejections as set forth in the last Office action.

The affidavit under 37 CFR 1.132 filed 12 October 2007 refer(s) only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716.

Indications of the affidavit under 37 CFR 1.132 filed 07 August 2006 appear to be on the grounds that:

1) Presumably with respect to Tortora's teaching of metal or carbon components, using bicomponent fibers:

- a) causes yarn or filaments with different orientation or physical properties,
- b) pollutes the color, and
- c) introduces particulate matter that shortens polymer filter life and pack life, resulting in expensive change costs.

2) Presumably with respect to Claim 3's "nylon 6" limitation being met via Tortora's teaching of tenacity:

- a) nylon 6,6 is preferred over nylon 6 for compatibility, and
  - b) fabric properties are determined by several factors.
- 3) Spunbonding is done above melt point, with polyester, nylon 6, and nylon 6,6 having melt points above 200 °C and processing temperatures reaching 300 °C.
- 4) There has been a years-long problem solved by the invention.

The indications of the affidavit are addressed as follows:

1a and b) In response to the indication that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., identical orientation or physical properties of filaments and color pollution) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

1a and b) Applicant's arguments with respect to differential orientation or physical properties of filaments and color pollution have been considered but are moot in view of the new ground(s) of rejection which combine the metal or carbon in the polymer blend, thus evening the color and properties.

1a and b) Appropriate weight is given to the opinion evidence. However, no factual evidence has been made of record showing that the orientation or physical properties of filaments and color are different.

1c) Although “expensive” provides some quantitative evidence of cost, the total product costs’ impact and whether the increase is proportional to increased material—the added metal or carbon—throughput are unclear.

2a) It is unclear what nylon 6 would be incompatible with, particularly since all species of nylon are implicit in Gillespie’s suitable polymers.

2b) Appropriate weight is given to the opinion evidence. However, the opinion does not provide clarity of the contradiction to the teachings of Tortora.

3) In response to the indication that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., processing the polymers up to 300 °C) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

4) Appropriate weight is given to the opinion evidence. However, no factual evidence has been made of record showing the problem solved within the broad scope of concentrations and agents encompassed by the claims.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Applicant's arguments filed 12 October 2007 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 103(a) rejections. Applicant's arguments appear to be on the grounds that:

1) Trimble teaches away from adding Tortora's antistatic agents via the use of electrostatic charge to the filaments (see Trimble, col. 5, lines 27-32).

2) Using antistatic agents in Trimble would defeat the purpose of Trimble's teaching of separation.

3) The bicomponent fibers of Tortora would cause color pollution, additional expense, and differential orientation and physical properties when added to the process of Trimble thus providing no motivation to combine Tortora's teachings with Trimble.

4) Since Tortora's bicomponent fibers reduce static charges, the static charge in the filaments would be lowered, defeating the purpose of the method of Gillespie of using static to separate filaments.

5) The bicomponent fibers of Tortora would cause color pollution, additional expense, and differential orientation and physical properties when added to the process of Gillespie thus providing no motivation to combine Tortora's teachings with Trimble.

6) Additional variables control strength in the material aside from tenacity. Thus, nylon 6 would not be the obvious choice.

7) Warburton's material is not suitable for being used in the temperatures of spunbond spinning processes, which reach 300 °C.



8) There is no motivation to use George's agent in Gillespie's high temperature process.

9) The long felt need for controlling static buildup in a spunbond process is met by the claimed invention.

The Applicant's arguments are addressed as follows:

1-3) Applicant's arguments with respect to Trimble have been considered but are moot in view of the new ground(s) of rejection.

4) Since the motivation to combine the references is to produce fibers that decrease static buildup (see Tortora, page 401, paragraphs 2-4) and in order to control electrical properties (see Gillespie col. 5, lines 35-42), any loss of static charge in processing would be to optimize the final product's static build-up as well as help with control of the filaments during lay-down by helping control their electrical properties.

4) Moreover, it is not clear that the contribution of antistatic properties of Tortora in the final product would significantly affect the process of Gillespie.

5 and 7) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., identical orientation or physical properties of filaments, uniform color, and processing the polymers up to 300 °C) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6) It is unclear whether the other variables are negated by the increased tenacity more to the extent that the overall strength would be less.

6) Moreover, it is noted that nylon 6's tenacity is conceded to improve strength via the increased tenacity.

7) Since Gillespie teaches to add the agent to the polymer blend, it would be expected that Warburton's agent would be successful at Gillespie's conditions absent.

8) Gillespie does teach to incorporate into the polymer melt components to control electrical properties (forming in an extruder) (see col. 5, lines 35-42), and George's copolymer composition provides the product with better degree of absorption of water and body fluids (see Abstract; col. 1, lines 46-49; and col. 6, lines 42-59), with water content controlling electrical properties.

9) Appropriate weight is given to the opinion evidence of record relating to the long felt need being met. However, no factual evidence has been made of record showing the problem solved within the broad scope of concentrations and agents encompassed by the claims.

9) In addition, there is no evidence that if persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references, they would still be unable to solve the problem. See MPEP § 716.04.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-

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8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patrick Butler  
Assistant Examiner  
Art Unit 1791



CHRISTINA JOHNSON  
SUPERVISORY PATENT EXAMINER